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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/619,462

07/16/2003

Shigeo Orie

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EXAMINER

DO, CHAT C

ART UNIT

PAPER NUMBER

2193

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DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/619,462	<b>Applicant(s)</b> ORII, SHIGEO	
	<b>Examiner</b> CHAT C. DO	<b>Art Unit</b> 2193	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 March 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 30,35 and 36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 30,35 and 36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. This communication is responsive to Amendment filed 03/24/2008.
2. Claims 30 and 35-36 are pending in this application. Claims 30 and 35-36 are independent claims. In Amendment, claims 1-29 and 31-34 are cancelled and claims 35-36 are added. This Office Action is made final.

#### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 30 and 35-36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Re claim 30, the newly limitations "a load balance is not kept...computer system" is unclear as how these limitations are related to the rest of other limitations within the claim. Claims 35-36 have the same rejection.

#### ***Claim Rejections - 35 USC § 101***

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 30 and 35-36 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 30 and 35-36 cite a method, medium, and apparatus for calculating an efficiency parameter of parallel computer in accordance with a mathematical algorithm. However, claims 30 and 35-36 merely disclose steps/components for calculating an efficiency parameter without disclosing a practical/physical application. Further, the claims appear to preempt every substantial practical application of the idea embodied by the claims. In addition, claims 30 is a software pro se including software modules for computing mathematically the parallel efficiency since all the calculators are the software modules for performing calculation. Even though, the claims mention an output of a parallel efficiency to an output device, but the parallel efficiency is just a mathematical parameter and hands over to the general/next component. Therefore, claims 30 and 35-36 are directed to non-statutory subject matter.

### ***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art in view of Tanaka et al. (U.S. 5,724,602).

Re claim 30, the admitted prior art discloses in pages 1-3 of the original specification a parallel efficiency calculation apparatus for calculating a parallel efficiency of a parallel computer system (e.g. page 1-2, particularly lines 7-15 page 2), comprising: a first calculator calculating a load balance contribution ratio (e.g. partial parameter as part of expressions 1-2 page 2 since there is no definition of this parameter); a second calculator calculating a virtual parallelization ratio representing a ratio, with respect to time, of a portion processed in parallel by said respective processors executed in said parallel computer system (e.g. partial parameter as part of expressions 1-2 page 2 since there is no definition of this parameter); a third calculator for-calculating a parallel performance impediment factor contribution ratio (e.g. partial parameter as part of expressions 1-2 page 2 since there is no definition of this parameter); and a fourth calculator calculating and outputting to an output device, a parallel efficiency by using said load balance contribution ratio, said virtual parallelization ratio, and said parallel performance impediment factor contribution ratio (e.g. as final result of expression 1 in page 2 as mathematical the product of all three above calculations).

The admitted prior art fails to disclose a load balance is not kept among said respective processors included in said parallel computer system. However, Tanaka et al. disclose in Figures 1-6 a load balance is not kept among said respective processors included in said parallel computer system (e.g. Figure 6).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention is made to add a load balance is not kept among said respective processors included in said parallel computer system as clearly seen in Tanaka et al.'s

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invention into the admitted prior art's invention because it would enable to handle efficient even in the case of imbalance distribution (e.g. col. 4 lines 19-33).

### ***Response to Arguments***

9. Applicant's arguments with respect to claims 30 and 35-36 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chat C. Do whose telephone number is (571) 272-3721. The examiner can normally be reached on M => F from 7:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lewis Bullock can be reached on (571) 272-3759. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Chat C. Do/  
Primary Examiner, Art Unit 2193

June 4, 2008